

## PCT



INTERNATIONAL PRELIMINARY EXAMINATION REPORT  
(PCT Article 36 and Rule 70)

REC'D 16 FEB 2005

Applicant's or agent's file reference ***	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP 03/10283	International filing date (day/month/year) 16.09.2003	Priority date (day/month/year) 17.09.2002
International Patent Classification (IPC) or both national classification and IPC C08F10/00		
Applicant BASELL POLYOLEFINE GMBH		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.
- ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).
- These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:
- I ☒ Basis of the opinion
  - II ☐ Priority
  - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
  - IV ☐ Lack of unity of invention
  - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - VI ☐ Certain documents cited
  - VII ☐ Certain defects in the international application
  - VIII ☐ Certain observations on the international application

Date of submission of the demand  25.02.2004	Date of completion of this report  16.02.2005
Name and mailing address of the international preliminary examining authority:   European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer  Parry, J  Telephone No. +31 70 340-1032 

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. **PCT/EP 03/10283**

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

1-15 as originally filed

**Claims, Numbers**

1-18 as originally filed

**Drawings, Sheets**

1 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).  
☐ the language of publication of the international application (under Rule 48.3(b)).  
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority in written form.  
☐ furnished subsequently to this Authority in computer readable form.  
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:  
☐ the claims, Nos.:  
☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. **PCT/EP 03/10283**

---

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	7-12
	No: Claims	1-6,13-18
Inventive step (IS)	Yes: Claims	
	No: Claims	1-18
Industrial applicability (IA)	Yes: Claims	1-18
	No: Claims	

2. Citations and explanations

**see separate sheet**

**Re Item V**

**Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

The following documents (D1-D2) will be referred to (see the ISR for the relevant passages):

- D1: US 2002/017617 A1 (BRENNER ARMIN ET AL) 14 February 2002 (2002-02-14)  
D2: WO 01/44801 A (DAHL IVAR M ;KARLSSON ARNE (NO); WENDELBO RENE (NO); AKPORIAYE DUN) 21 June 2001 (2001-06-21)

1. D1 describes a method for determining properties of a material library which includes (i) introducing the material (ii) carrying out a chemical reaction (polymerisation) and (iii) analysing the reaction product in the liquid or gas effluent. Catalysts or catalyst precursors can be heated to temperatures of 20-1500 C to dry or calcine the catalyst. Since polymers can exist in the molten state or dissolved as solutions in organic solvents (like in HPLC analysis of polymers), they can be analysed in a liquid effluent. Hence present claims 1-6 are not novel.

2. Since the analysis of the polymer products of D1 in liquids is not problematic (see point 1 above), and is in fact standard in the art (for example, in HPLC), claims 7-12 appear obvious modifications to make in the light of D1 taken alone or in conjunction with D2 (see the whole document). Hence claims 7-12 are not considered inventive.

3. Claims 13-18 appear to be anticipated by D2 (see the whole document, especially the figures). The frit 208 of D2 (see for example fig. 2) merely corresponds to the "bottom (10)" of present claim 13. There are therefore no "internals" according to present claim 13. Thus see the text of D2 on p. 10 reproduced herein below, especially the part underlined for one alternative reactor structure:

"Figures 1-4 show several different general schematics that are suitable for fluidizing the catalyst beds in the present invention. Each of the figures shows a single reactor and, in actual practice, the number of reactors may equal the number of catalysts in the array of catalysts being evaluated. FIG. 1 is the most simplistic in concept and depicts the fluidizing gas flow 2 being introduced below the reactor 4 and flowing upward through a frit 6 in the bottom of the reactor to fluidize the catalyst bed 8. Frit 10 operates to contain the catalyst within

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

---

International application No. PCT/EP 03/10283

reactor 4. The effluent is removed at the top of reactor 4 via line 12. FIG. 2 shows an alternate system where the fluidizing gas flow 202 is introduced to the reactor 204 through conduit 206 which extends through reactor 204 and through frit 208 into catalyst bed 210. The effluent is removed via channel 212. Alternatively, the catalyst bed may be located above frit 208 shown as catalyst bed 214."

Moreover, the reactors of D2 are mentioned on present p. 8, first paragraph, as being suitable for carrying out the present invention. Hence claims 13-18 are not considered novel.